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Measuring Participation: Development and Validation the Participatory Behaviors Scale

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Abstract

Studies of political and civic engagement have revealed that different types of participatory behaviors exist. Relying on Ekman and Amnå's (Human Aff 22(3):283–300, 2012) participation typology, we developed a new measure, the Participatory Behaviors Scale (PBS), to analyze four dimensions of participation: formal political participation, activism, civil participation and disengagement. As proposed by Ekman and Amnå, disengagement is a genuine and active style of participation. A study was conducted on a sample of community residents (N = 566) to examine the statistical validity and psychometric properties of the PBS. Confirmatory factor analyses showed that the second-order factor structure of PBS (composed of four first-order factors, i.e., disengagement, civil participation, formal political participation and activism) produced the most satisfactory fit indexes. The reliability and validity of the scale were verified. The scale was then tested on a second sample of voters. The methodological and theoretical implications are discussed, and further developments are outlined.

1. Introduction

The variety of forms taken by political and civic engagement in contemporary societies has resulted in a wide and variegated repertoire of participatory behaviors. Following and gradually updating this changing phenomenology, political scientists have traced many significant theoretical distinctions to account for the different manifestations of political and civic engagement, which will be discussed herein. Empirical research has attempted to capture some of these distinctions according to the theoretical typologies that have been proposed over time; nevertheless, the lack of a unitary framework for reference has been inevitably mirrored in the large number of partial, local and ad hoc measurement instruments. Based on this consideration, the aim of the current paper is to introduce and validate a multi-dimensional measure of participatory behaviors inspired by the recent and thorough taxonomy proposed by Ekman and Amnå (2012).

After a brief introduction to the notion of participation, the main differences among the various forms of participation will be highlighted, and the classification elaborated by Ekman and Amnå (2009, 2012), which subsumes and organizes them, will be illustrated. A brief review of the measurement instruments will follow, and then the new scale and validating analyses will be presented and discussed.

2. Political and Civic Participation

Participation can be defined as taking part in an event of public interest. Heller et al. (1984), for example, define participation as “a process in which individuals take part in decision making in the institutions, programs, and environments that affect them” (p. 339). In the term “participation”, we can detect two semantic valences: participating as “taking part” and participating as “being part”. Therefore, participation entails (community) involvement and (social) identity and draws on the relationship between authority, influence and power (Dahl 1963). Being part and taking part describe one of the most renowned distinctions, that between “expressive” and “instrumental” participation. Expressive acts are motivated by one’s sense of identity and obligation as a “neighbor” and include behaviors such as social exchange with neighbors and participation in community groups designed to promote social interaction, neighborliness, and friendship among community members. Instrumental participation is instead motivated by the functional and political concerns of people, such as the desire to protect personal investments and promote local businesses in the community (Pateman 1970; Held 1996; Guest et al. 2002). However, the significant distinction on which this work draws is that between political and civic (or civil) participation.

Political participation is generally referred to as an interest in political life; such interest can take many appearances and can result in either indirect involvement or direct political action (Rollero et al. 2009). In addition to voting, political participation includes (among others) actions such as joining a political party or a non-governmental advocacy group, campaigning, and running as an electoral candidate. The conceptual enlargement of the notion of participation brought about a distinction between “conventional” and “non-conventional” participation (Barnes and Kaase 1979), with the latter encompassing relatively new political behaviors, such as writing to a newspaper, boycotting products, occupying public spaces, adhering to strikes and sometimes even resorting to physical violence. This new cluster of behaviors was meant to refer to the “action by ordinary citizens directed toward influencing some political outcomes” (Brady 1999, p. 737), in contrast with the actions undertaken by the élites.

Recently, Teorell et al. (2007), inspired by the studies of Verba and Nie (1972) and Brady et al. (1995), have developed a broader definition of political participation, introducing a typology that includes citizen actions intended to influence the political outcomes in a community. Their typology considers five dimensions: (1) electoral participation; (2) consumer participation, that is, the citizen as a critic consumer, who donates money to charity, boycotts certain products and signs petitions; (3) party activity, i.e., being a member in or an activist for or donating money to a political party; (4) protest activity, which refers to actions such as taking part in demonstrations, strikes or protests; and (5) contact activity, that is, contacting organizations, politicians or public officials. The authors report empirical evidence of how these manifest forms are closely interrelated.

However, this typology does not consider latent forms of participation. The concept of latent participation is not new (e.g., Parry et al. 1992; van Deth 2001; Berger 2009; Amnå 2010), but it has been less developed in contemporary analyses. Latent participation has two components. The first is the psychological involvement of individuals in politics, that is, their interest and attentiveness, and this component is also referred to as “invisible” participation. The second component includes “non-political” or “semi-political” activities that, though not directly related to the field of politics, may have an important impact on conventional political behaviors: reading newspapers or surfing the Internet, donating money to worthy causes, expressing opinions in blogs and performing many other “pre-political” activities not relegated to the circle of family and friends.

Ekman and Amnå (2012) have developed a thorough typology on a matrix that intersects the two forms of participation discussed above (manifest and latent) with two levels of political behavior (individual and collective). The objective of their proposal is to organize all forms of civic and political behavior into a unitary framework.

In their taxonomy, manifest political behaviors include all actions, either individual or collective, aimed at influencing government decisions and political outcomes, including aim-oriented, rational, observable and measurable actions; even “contact activities” are considered forms of formal political participation, such as writing politicians or officials to report or obtain intervention. At the collective level, a typical example of this category is membership in a political party, trade union or non-governmental organization (NGO). In addition to these “formal activities”, the authors added extra-parliamentary actions. In the literature, these behaviors are often called “non-conventional”, but Ekman and Amnå (2012) consider this term obsolete and use “activism” instead. In fact, some of the actions that were previously considered of the non-conventional type, such as strikes and petitions, have become very common among citizens. Hence, the authors prefer the term “extra-parliamentary” and distinguish between legal and illegal forms. The former include participation in demonstrations and strikes or militancy in feminist organizations, environmental groups, and so forth—all examples of collective participation. At the individual level, actions of this type include signing petitions, distributing flyers, and boycotting or buying certain products for ideological, ethical or environmental reasons. Other extra-parliamentary forms are, however, illegal, such as violent manifestations, unauthorized demonstrations or riots triggered by ideological reasons (racist or extremist groups). Other examples include irruptions of environmentalists in fur stores or in laboratories that test on animals, attacks by Greenpeace on whaling ships, the Pussy Riot protest in Russia and even the hacker attacks by organized groups such as Anonymous. An example of individual illegal forms is not paying for a subway ticket to protest against public transport policy.

Ekman and Amnå (2012) also include in their classification latent forms of political participation (also labeled by them as “civil participation”), in which the psychological aspect represented by attention and interest in political and societal issues (what they call “social involvement”) corresponds to, and somehow precedes, the behavioral aspect, which they named “civic engagement”. Though related, these two aspects are distinct, as noted also by Martín and van Deth (2007). More precisely, civic engagement refers to the ways in which citizens participate in the life of a community in order to improve the living conditions of disadvantaged groups or to shape the community’s future (Adler and Goggin 2005). Some definitions of civic engagement emphasize participation in voluntary service to one’s local community, either by an individual acting independently or as a participant in a group (e.g., Diller 2001). Adler and Goggin (2005) categorize this form as civic engagement as community service. Others (e.g., Hollister 2002) restrict the term to apply only to actions taken collectively to improve society (civic engagement as collective action). Yet other definitions (e.g., Ronan 2004) limit the meaning of the term to activities that are not only collective but also specifically political (i.e., that involve government action) (civic engagement as political involvement). Finally, other definitions (Keeter et al. 2002) emphasize social change as the outcome of civic engagement (civic engagement as social change).

What is definitely new in the Ekman and Amnå (2012) proposal is the consideration of disengagement as an additional type of participation, which can take both passive and active forms. The passive form refers to the behaviors of people who are not interested in politics, do not follow political debate have no political opinions, and willingly delegate others to

administer the *res publica*. And most importantly, they do not worry about it. The active form refers to the behaviors of people who are disgusted by politics and, for this reason, actively turn away from it. These people consider all politicians as a clique and during the elections, they not only do not vote, they demonstrate against the vote. While the former is an a-political behavior, the latter is an anti-political behavior. In extreme cases, this orientation can lead to violent behavior, fights, brawls, such as those that occasionally break out in the suburbs of large cities involving young second-generation immigrants, who protest against a society from which they feel excluded.

The Ekman and Amnå typology clarifies, in a very precise scheme, the theoretical distinction between civic and political participation. It is a typology that reflects trends in modern society and is better able to capture the multiple nuances of citizen participation. Moreover, it provides a theoretical framework for the development of reasoned behavioral lists that can be used as empirical indicators of participation. Therefore, summarizing, we can say that the proposal of these authors is innovative compared to many other typologies, for the following reasons: (a) it includes all forms of civic and political behavior, emphasizing the importance of latent (or pre-political) participation, in its turn divided into social involvement (attention) and civic engagement (action); (b) it incorporates the category of “non-participation” (distinguishing between those who are a-political and those who are anti-political) which may not necessarily be declassified in the absence of participation; (c) it is a classification that defines various concepts and avoids conceptual confusions. This typology presents some unequivocal strengths: not only clarifies the distinctions between concepts sometimes used interchangeably, putting each of them in its place, but underlines precisely the theoretical distinction between civic and political, taken from the distinction between manifest forms and latent forms of participation. The “political” has to do with legal outcomes and processes but also with illegal behavior, if they are directed to processes of decision-making. What makes the difference is not the action in sé, but what is involved in the action and the purpose for which it is performed. In the literature, there has been a continual expansion of the list of participatory methods, without an adequate theoretical support or a more elaborate reference model to explain the emergence of these modes of expression. It is true that the existence of latent mode had already been noted, but was not considered as an asset in its own right, so much so that it had been excluded from the above definitions of political participation (Parry et al. 1992; van Deth 2001).

Though Ekman and Amnå (2009, 2012) provide examples of political formal participation, activism, social involvement, civic engagement and disengagement, they do not structure an empirical measure that can support their theoretical proposal. The purpose of the present work, therefore, is to create and validate a measure of participation (the Participatory Behavior Scale) based on their typology. First, however, some of the most commonly used measurement instruments to date are briefly reviewed.

3. The Existing Methods of Measuring Participation: A Brief Review

The purpose of this section is twofold: (a) we intend to demonstrate that a lot of literature uses measures of participation that are not explicitly based on a theoretical model but are often based on a mere checklist of behaviors; (b) we illustrate the appropriate measures by which it is possible to start to select the items for the new measure proposed in this paper.

It is very difficult to offer a systematic review of the measures of civic and political participation because in most cases, researchers have not explicitly defined the criteria for the selection of items. A recent meta-analysis on the relationship between sense of

community and community participation found that in 85.3 % of the studies reviewed (N = 35), the authors used ad hoc scales (Talò et al. 2014).

In many cases, political participation has been measured—especially in surveys—by asking participants whether they voted in the last local and/or national elections (e.g., Anderson 2009; Prezza et al. 2009; Rollero et al. 2009) or by asking them to evaluate, through a single item, their level of involvement in community activities (e.g., Bowen et al. 2000; Liu and Besser 2003). As for civic engagement, the most frequently used method of measurement has been to inquire about, for example, active membership in religious groups, cultural associations, football fan clubs, human rights or emergency associations, scouts, volunteer associations, environmental groups, or student councils, among other organizations (e.g., Cicognani et al. 2012).

In addition to “classic” participation index proposed by Verba et al. (1995), another more common measure is the political participation index (PPAR) of Davidson and Cotter (1986). The authors divide political behaviors into five clusters: campaigning (i.e., giving money to a campaign, working in a campaign, attending a political rally); voting (i.e., voting in the last presidential election, voting in the prior presidential election, voting in general elections for governor); talking (i.e., talking politics with family, with friends, and at work); working (i.e., working with others to solve community problems, forming groups to solve community problems, discussing public problems with local nonpolitical leaders), and contacting (i.e., discussing public problems with government or political officials, contacting local government officials). As we can see, in this scale they are present but not distinct manifest and latent forms of political participation.

Some attempts to overcome the classical political participation consist of data taken from studies on community participation. An example is the Community Participation Scale (CPS) of Rapley and Beyer (1996), a nine-item scale whose sample items include becoming involved in any local clubs, organizations or schemes; contacting the local council about local services; and contributing either money or time to a scheme to improve the community. Similar to CPS is the measure used by Peterson et al. (2006), an eight-item scale that was used to assess civic involvement and participatory behaviors in community action activities. Respondents were asked to indicate their frequency of participation in a variety of community groups and events (e.g., signing a petition, writing a letter to influence local policies, attending a public meeting to press for a policy change) over a 3-month period.

An example of a civic engagement measurement is the 19 Core Indicators of Engagement that was used in a USA national telephone survey in 2001 (The Civic and Political Health of the Nation, Keeter et al. 2002). The researchers who conducted the survey created a list of 19 “core activities” that they considered to be the core components of civic engagement. These activities were divided into three main categories. Civic indicators included community problem solving, regular volunteering for a non-electoral organization, active membership in a group or association, participation in fund-raising runs/walks/rides, and other fund-raising for charity. Electoral indicators included regular voting; persuading others; displaying buttons, signs, or stickers; making campaign contributions; and volunteering for candidates or political organizations. Indicators of political voice included contacting officials, contacting the print media, contacting the broadcast media, protesting, participating in e-mail petitions, participating in written petitions, boycotting, and canvassing. About the purpose of this paper, we find the contribution of Keeter and colleagues very interesting, because it proposes a form of theoretical taxonomy, even if, in its essence, it remains a measure of political participation.

In this brief review, we do not consider the Civic Participation (CP) proposed by Weber et al. (2004) as a true measure of participation, because the goal of the CP scale is to identify the willingness of the respondents to contribute, the importance of their contributions and those of others, and their actual participation activities. Hence, this instrument does not “count” the frequency of participatory behaviors but rather measures attitudes towards civic engagement in community life.

As we have seen before, all observed scales are limited to measuring the formal political participation with brief “excursions” in latent political participation. However, a lot of items that have been proposed in the new measure of participation are already widely present in these scales. Some examples are the Civic indicators and the Indicators of political voice of the 19 Core Indicators of Engagement (Keeter et al. 2002) and some item from the Peterson’s scale (Peterson et al. 2006). In other words, we can say that Ekman and Amnå did not invent new categories of participation, but have systematized the various behaviors in a precise grid.

4. Research Methodology

4.1 Scale Design

The Participatory Behaviors Scale (PBS) was designed through a two-step process: (i) analysis of the literature and identification of the theoretical framework and (ii) definition of the items and development of the scale.

First, an analysis of both the theoretical and empirical psychosocial literature on civic and political participation was undertaken. After an extensive review, the model proposed by Ekman and Amnå (2012) was selected as the framework of reference by virtue of its capacity to organize multiple and diverse forms and different levels of participation into a unitary framework.

Second, items were created in a working group composed of experts in political and civic participation. In addition to the authors, were involved three other researchers who have carried out a research on political participation and validation of scales of political attitudes. This work was mainly done via email and via VoIP, over a period of about a month. The starting point for the formulation of the items was the table proposed by Ekman and Amnå (2012, p. 292). We have also considered many items present in the scales described in the previous paragraph and, in particular, the 19 Core Indicators of Engagement (Keeter et al. 2002) and the Peterson’s scale (Peterson et al. 2006). The group examined and discussed the clarity of the proposed items, the coverage of the sub-dimensions hypothesized, their possible interrelatedness and the response format, with the aim of creating a scale whose items could discriminate among respondents. The item generation process resulted in a 28 item-scale, composed of seven items for disengagement, eight items for civil participation (two for social involvement and five for civic engagement), and thirteen items for political participation (seven for formal political participation and six for activism) (Table 1). The items were preceded by the following introductory statement: “The following list includes a list of behaviors characterizing civic and political engagement. Can you indicate to what extent you recognize these behaviors as your behaviors?”

4.2 Sample Selection, Data Collection and Analyses

The participants consisted of 566 individuals (56.4 % female) aged between 17 and 72 years (Mean = 35.63, SD = 12.74) who resided in a designated geographical region in Southern Italy. The majority of the participants were high school graduates (48.9 %). In terms of occupation, the most frequently represented categories were clerical workers (19.4 %), students (18.5 %) and workmen (11.4 %). Participants were selected based on quota sampling by gender and age and were recruited using a snowball design. The participants were invited to complete an anonymous questionnaire about their local community by answering a set of questions regarding relevant social issues. Completing the questionnaire took approximately 15 min, and no incentives were given for completing the task.

Data were collected using a self-report questionnaire that included the following measures.

4.2.1 Psychological Sense of Community

The Brief Sense of Community Scale (BSCS) developed by Peterson et al. (2008) was used. This scale measures the four dimensions posited by McMillan and Chavis (1986), including need fulfillment, membership, mutual influence and emotional connection. The eight items were rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree). All items were phrased so that the referenced community was the city/town in which the respondents lived.

4.2.2 Individualist Versus Collectivist Orientation

The Scale of Horizontal and Vertical Individualism and Collectivism of Triandis and Gelfand (1998) was used. It is a 16-item scale intended to measure Individualism—which emphasizes independent self-construal, exchange relationships, personalistic attitudes, and personal goals—and collectivism—which emphasizes interdependent self-construal, communal relationships and norms, and in-group goals. The sixteen items were rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

4.2.3 Political Efficacy

The Political Efficacy Scale of Yeich and Levine (1994) was used. This scale measures internal political efficacy (i.e., the belief that one can understand politics and therefore participate in politics), external political efficacy (i.e., the belief that one is effective when participating in politics), and collective political efficacy (i.e., an individual's expectation that collective action participation can make a difference and bring about desired changes). The twenty items were rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

4.2.4 General Values

The Brief Inventory of Values of Stern et al. (1998) was used. It is a brief inventory derived from Schwartz's 56-item instrument measuring the structure and content of human values (Schwartz 1992). The inventory is composed of five 3-item scales measuring the following major clusters: Self-Enhancement, Openness to Change, Biospheric, Altruistic and Conservation (or Traditional) values. The fifteen items were rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

4.2.5 Political Values

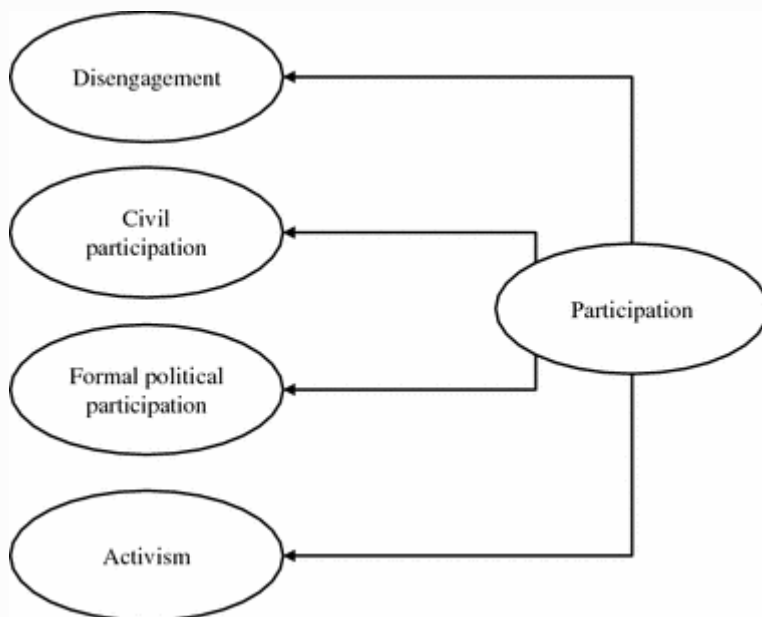
The Core Political Values (CPV) scale of Schwartz et al. (2010) was used. It is a scale consisting of 34 items designed to measure eight types of political values: Law and order, Traditional morality, Equality, Foreign military intervention, Free enterprise, Civil liberties, Blind patriotism and Accepting immigrants. The items were rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

4.2.6 Background Information

Participants were asked to provide information on their age, gender, level of education, profession, place of residence and political orientation.

We hypothesized a model with a second-order variable (participation) saturated by four first-order latent variables (disengagement, civil participation, formal political participation and activism) (Fig. 1). The following four sets of analyses were performed. First, a series of Confirmatory factor analyses (CFAs) was conducted using Mplus® (Muthén and Muthén 1998) to validate the proposed scale (PBS-28) and to structure a short version (PBS-16). The one-factor PBS model and four-factor PBS model were also tested as alternative accounts. Two CFAs were further conducted to confirm the four-factor structure of the two PBS measures.

Fig. 1



Model of the participatory behaviours scale

The following fit indices were used: (a) The Chi Square Test of Model Fit, which measures the difference between the covariance matrix for the observed data and the covariance matrix from a theoretically specified structure/model. Non-significant Chi square values suggest a good fit of the model. However, because the Chi square index is affected by the size of the correlations in the model (i.e., the more the correlations, the poorer the fit), alternative

and additive measures of fit have been developed, which were also used. (b) The Comparative Fit Index (CFI) (Bentler 1990) is based on the comparison of the χ^2 for the implied matrix with the χ^2 for the matrix of a null-model (all variables are uncorrelated). Values higher than .90 indicate an acceptable fit, and those higher than .95 indicate an excellent fit. (c) The Tucker Lewis Index (TLI), also known as NNFI (Non-Normed Fit Index), is based on the comparison of the Chi square for the implied matrix with the Chi square for the matrix of a null-model. Values higher than .90 indicate an acceptable fit, and those higher than .95 indicate an excellent fit (Marsh et al. 2004). (d) The most important index after the Chi square is the Root Mean Square Error of Approximation (RMSEA), which represents the average of the residual correlation. MacCallum et al. (1996) have used .01, .05 and .08 thresholds to, respectively indicate excellent, good, and mediocre fit. In addition, RMSEA can be evaluated in terms of probability (test of close fit) because it is accompanied by limits for the confidence interval for $p = .10$ (Hu and Bentler 1999). (e) Finally, the Standardized Root Mean Square Residual (SRMR, Jöreskog and Sörbom 1988) is an absolute measure of fit that is defined as the standardized difference between the observed correlation and the predicted correlation. A value of 0 indicates perfect fit. Hu and Bentler (1999) indicate a cut-off value of $\leq .08$ for good fit.

Second, the convergent and discriminant validity and the reliability of PBS were tested by Cronbach's Alpha, the Composite Reliability (CR), the Average Variance Extracted (AVE), the Maximum Shared Squared Variance (MSV) and the Average Shared Squared Variance (ASV) (Fornell and Larcker 1981). Based on Hair et al. (2010), the CR value must be above .70 for acceptable reliability. For convergent validity, the AVE value must be above .50 and less than the value of CR. For discriminant validity, both the MSV and the ASV values need to be smaller than the value of AVE. In addition, the risk of multicollinearity among the PBS factors was controlled.

Third, the construct validity was analyzed through correlations with a set of variables that are deemed to be related to civic and political participation, namely, political efficacy, general and political values, individualist vs. collectivist orientation, and sense of community.

Finally, to confirm the reliability of the instrument, we re-subjected the scale to a second sample of voters in the primary elections of two opposite Italian coalitions. In this case, a new series of CFAs was performed.

4.3 Confirmatory Factor Analyses

To validate the proposed PBS structure, a CFA on the 28-item version was performed. Because the indices did not show a satisfactory fit (Table 2), some items were excluded, until only four items per factor remained. Indeed, the literature on factor analysis recommends maintaining a 4:1 ratio between the observed and latent variables (Conway and Huffcutt 2003; Fabrigar et al. 1999; Lee and Comrey 1979). Items were excluded either because of a non-significant factor loading (i.e., n. 9 and n. 28), a low factor loading ($\leq .30$) or low communalities (i.e., n. 1, n. 4, n. 8, n. 19, n. 20 and n. 22) or because they were transversal to other factors (i.e., n. 2 on Activ. and n. 15 on For. Pol. Part.) or redundant (i.e., n. 14 and n. 16) (see Table 3). The CFA on the 16-item version showed good fit indexes (Table 2).

Table 2 CFA fit indexes for PBS

Model [n item]	χ^2 [N, DF] sig.	CFI	TLI	RMSEA [CI] sig.	SRMR
<i>Four first-order latent factors and a single second-order latent factor</i>					
PBS 1 [28]	1927.30 [487, 346] .00	.91	.90	.09 [.09; .10] .00	.11
PBS 2 [16]	436.73 [487, 100] .00	.96	.95	.05 [.04; .08].02	.04
<i>One first-order factor</i>					
PBS 3 [28]	2413.45 [487, 350] .00	.44	.40	.11 [.10; .11] .00	.11
PBS 4 [16]	436.73 [487, 100] .00	.82	.78	.08 [.07; .09] .00	.07
<i>Four first-order correlated factors</i>					
PBS 5 [28]	1927.30 [487, 346] .00	.57	.53	.10 [.09; .10] .00	.11
PBS 6 [16]	436.73 [487, 100] .00	.82	.78	.08 [.07; .09] .00	.07

Alternatively, we tested the one first-order factor PBS for the 28-item version and the 16-item version. None of these models yielded satisfactory fit indexes (Table 2). We also tested a four first-order correlated factor (disengagement, civil participation, formal political participation and activism) for the 28-item version and the 16-item version. Even in this case, no version reached an acceptable fit (Table 2). The analyses showed that the second-order structure of PBS was preferable to the alternative models.

4.4 Reliability and Validity Analyses

To test the validity and the reliability of the scale, in addition to Cronbach's Alpha, the Composite Reliability (CR), the Average Variance Extracted (AVE), the Maximum Shared Squared Variance (MSV) and the Average Shared Squared Variance (ASV) were calculated (Fornell and Larcker 1981; Hair et al. 2010). According to the estimates provided in Table 4, each factor sufficiently differed from the others. Based on the strong evidence for reliability and convergent and discriminant validity, the measurement model was deemed acceptable.

Table 5 shows the values of the Tolerance index and of the Variance Inflation Factor (VIF) used to analyze the presence of multicollinearity. Both the Tolerance index and the VIF excluded the presence of relevant multicollinearity among the four first-order factors analyzed (disengagement, civil participation, formal political participation and activism) (Pedhazur 1997).

Table 3 Second-order confirmatory factor analysis of the PBS

Item	Latent factor	PBS-28	PBS-16
1	Disen.	.29**	
6	Disen.	.50**	.50**
7	Disen.	.61**	.66**
11	Disen.	.77**	.83**
12	Disen.	.74**	.73**
16	Disen.	.39**	
19	Disen.	.30**	
2	Civ. Part.	.64**	
3	Civ. Part.	.36**	.48**
8	Civ. Part.	.16**	
13	Civ. Part.	.65**	.50**
17	Civ. Part.	.68**	.51**
20	Civ. Part.	.27**	
23	Civ. Part.	.38**	.48**
28	Civ. Part.	.07	
4	For. Pol. Part.	.22**	
9	For. Pol. Part.	-.01	
14	For. Pol. Part.	.64**	
18	For. Pol. Part.	.43**	.48**
21	For. Pol. Part.	.50**	.42**
24	For. Pol. Part.	.78**	.92**
26	For. Pol. Part.	.43**	.51**
5	Activ.	.34**	.42**
10	Activ.	.46**	.47**
15	Activ.	.47**	
22	Activ.	.30**	
25	Activ.	.79**	.86**
27	Activ.	.50**	.52**
Disen.	Participation	-.61**	-.69**
Civ. Part.	Participation	.73**	.95**
For. Pol. Part.	Participation	.93**	.75**
Activ.	Participation	.90**	.88**

** $p < .01$

Table 4 Convergent, discriminant validity and reliability tests

Thresholds	CR >0.7	AVE >0.5	MSV MSV < AVE	ASV ASV < AVE	Cronbach's α >0.7
<i>Factor</i>					
Disengagement	.80	.51	.34	.21	.80
Civ. Part.	.81	.52	.40	.34	.72
For. Pol. Part.	.79	.52	.38	.31	.78
Activism	.80	.54	.29	.27	.71
PBS-16	.82	.57	.41	.30	.81

Table 5 Collinearity statistics of the four PBS-16 dimensions

	Tolerance	VIF
Disengagement	.85	1.18
Civ. Part.	.58	1.72
For. Pol. Part.	.61	1.65
Activism	.62	1.61

Table 6 Correlation, mean and standard deviation of the four PBS-16 dimensions

	Disen.	Civ. Part.	For. Part.	Activ
Disengagement	–			
Civ. Part.	–.39**	–		
For. Part.	–.19**	.54**	–	
Activism	–.19**	.52**	.57**	–
Mean	8.25	8.86	5.75	7.93
SD	3.52	2.82	2.85	3.13

** $p < .01$

4.5 Correlation Analyses

First, we analyzed the correlations between the four factors of PBS (Table 6). As expected, disengagement was negatively correlated with all the other forms of participation, while civil participation, formal political participation and activism were strongly correlated (r between .52 and .57).

Correlational analyses were then performed to examine the construct validity of the 16-PBS. Table 7 presents the bivariate correlations between the demographic variables and the 16-PBS. By analyzing only the most relevant data, political orientation was positively correlated with disengagement ($r = .18$) and negatively correlated with activism ($r = -.24$). This result indicates that the more right-leaning the respondents were, the more likely they were to be disengaged, and the more left-leaning the respondents were, the more likely they were to exhibit activism. It is equally interesting to note that political orientation did not appear to be related to civil and formal political participation.

Table 7 Correlations among the four dimensions and the total score of PBS, gender (0 = female; 1 = male), age, education, political orientation (1 = left; 10 = right), political efficacy (and subscales), sense of community (and subscales), general values, political values, individualism and collectivism

	Disen.	Civ. Part.	For. Part.	Activ	PBS-16	Mean	SD
Gender	-.02	.12**	.15**	.07	.13**	0.44	0.50
Age (17–72 years)	-.03	.12**	.10*	.02	.10*	35.63	12.74
Education	-.22**	.15**	.14**	.20**	.08	3.13	0.87
Political orientation	.18**	-.06	.02	-.24**	-.03	4.89	2.35
Political Efficacy	-.40**	.35**	.36**	.33**	.23**	58.19	9.69
Internal	-.37**	.34**	.38**	.33**	.25**	15.49	3.64
External	-.30**	.24**	.26**	.16**	.12**	20.69	6.58
Collective	-.13**	.13**	.10*	.21**	.12**	22.06	4.80
Sense of Community	-.06	.13**	.11**	-.01	.08	26.05	5.39
Needs fulfillment	.01	.07	.07	-.03	.06	5.49	2.10
Group membership	-.02	.05	.04	-.05	.02	7.03	1.84
Influence	-.11**	.16**	.17**	.12**	.13**	6.31	1.47
Emotional connection	-.10*	.12**	.09*	-.02	.04	7.20	1.70
Biospheric	-.09*	.14**	-.03	.16**	.07	11.48	2.79
Altruistic	-.13**	.10*	-.02	.14**	.02	12.77	2.43
Conservation	-.03	-.01	-.20**	-.16**	-.16**	12.47	2.21
Self-enhancement	.04	.05	.06	-.06	.04	8.08	2.54
Openness	-.03	.12**	.04	.13**	.10*	10.92	2.66
Free enterprise	.19**	-.12**	-.06*	-.19**	-.06	10.30	3.17
Traditional morality	.17**	-.06	-.13**	-.33**	-.13**	16.75	4.34
Equality	-.13**	.08	-.08	.07	-.03	16.53	2.94
Accepting immigrants	-.30**	.20**	.12**	.28**	.12**	9.25	2.86
Blind patriotism	.09*	-.01	.00	-.19**	-.03	9.43	3.03
Civil liberties	-.16**	.09*	.03	.18**	.04	12.02	2.19
Foreign military int.	.15**	.02	.03	-.12**	.04	12.80	3.59
Law and order	.24**	-.09*	-.12*	-.29**	-.08	20.87	6.31
Individualism	.09*	-.01	.02	-.04	.03	27.08	5.24
Collectivism	-.01	.05	-.09*	-.10*	-.06	32.51	4.47

* $p < .05$; ** $p < .01$

Table 8 CFA fit indexes for 16-PBS on the sample of voters in the primary elections

Sample	χ^2 [N, DF] sig.	CFI	TLI	RMSEA [CI] sig.	SRMR
Overall	559.14 [680, 100] .00	.96	.93	.07 [.06; .08] .00	.06
Left-orientated	420.21 [456, 100] .00	.97	.95	.08 [.07; .09] .00	.06
Right-orientated	428.79 [224, 100] .00	.95	.91	.08 [.07; .10] .00	.07

Finally, regarding individualism vs. collectivism, the former was mildly correlated with disengagement ($r = .09$), while collectivism was negatively correlated with formal political participation ($r = -.09$) and with activism ($r = -.10$).

Bivariate correlations between the 16-PBS and the set of theoretically relevant variables were also performed (Table 7). We included the following variables (with the respective Cronbach's Alpha): political efficacy (overall $\alpha = .78$, internal $\alpha = .79$, external $\alpha = .82$ and collective $\alpha = .83$), general values (biospheric $\alpha = .79$, altruistic $\alpha = .74$, conservation $\alpha = .88$, self-enhancement $\alpha = .78$ and openness $\alpha = .83$), political values (free enterprise $\alpha = .68$, traditional morality $\alpha = .74$, equality $\alpha = .80$, accepting immigrants $\alpha = .75$, blind patriotism $\alpha = .79$, civil liberties $\alpha = .75$, foreign military intervention $\alpha = .68$ and law and order $\alpha = .88$), individualist vs. collectivist orientation (respectively $\alpha = .75$ and $\alpha = .78$) and sense of community (overall $\alpha = .81$, needs fulfillment $\alpha = .88$, group membership $\alpha = .83$, influence $\alpha = .60$ and emotional connection $\alpha = .68$).

It was not surprising that political efficacy was negatively correlated with disengagement ($r = -.40$) and moderately correlated with the active forms of participation ($r = .35$ with civil part. $r = .36$ with formal part. and $r = .33$ with activism). However, general participation was not related to the global measure of sense of community. This result was only partly surprising because in a meta-analytic study, we had found that sense of community and community participation were only mildly related, and their relationship was often mediated by other variables (Talò et al. 2014).

Regarding the general values, the results were quite heterogeneous. Among the most important data, we want to underline that conservation values were negatively correlated with formal participation ($r = -.20$) and activism ($r = -.16$). As for political values, free enterprise, accepting immigrants and law and order were correlated with all the forms of participation. Traditional morality was correlated with disengagement ($r = .17$) and civil ($r = -.13$) and formal participation ($r = -.33$), while equality was only correlated with disengagement ($r = -.13$). Blind patriotism was weakly connected with disengagement ($r = .09$) and activism ($r = -.19$). Civil liberties were associated with disengagement ($r = -.16$), civil participation ($r = .09$) and activism ($r = .18$), while foreign military intervention was correlated with disengagement ($r = .15$) and activism ($r = -.12$).

Finally, regarding individualism vs. collectivism, the former was mildly correlated with disengagement ($r = .09$), while collectivism was negatively correlated with formal political participation ($r = -.09$) and with activism ($r = -.10$).

4.6 Confirmatory Analysis in a Second Sample

To confirm the reliability of the PBS on a politically engaged sample, we administered the scale to a sample of voters from two different primary elections for the selection of candidate for mayor of a southern Italy city: Lecce (93,500 inhabitants, about). In a period of about a month, in fact, there were two primary elections organized by liberal and conservative coalitions in the city. In another research on the primary elections of the same city (Mannarini et al. 2014), we observed that this type of voters are more involved in political issues, more mobilized in the campaign and more politically aligned, compared to the voters in local elections.

Participants ($N = 680$, 51.7 % female) were recruited from among sympathizers who voted in the left- and right-wing coalition primary elections. In total, 67.1 % of the participants were politically left-leaning, and 32.9 % were right-leaning. The average age of the left-leaning participants was 47.3 years old ($SD = 14.1$), and that of the right-leaning participants was 41.4 years old ($SD = 17.1$) [$F(1, 648) = 21.6$, sig. = .00]. The majority of participants in the left-leaning subgroup were college graduates (62.3 %), and the majority of participants in the right-leaning subgroup were high school graduates (56.7 %).

The participants were contacted at the polling stations and asked to complete a questionnaire immediately after voting. They were informed that the survey investigated social and psychological issues that were relevant to politics. The questionnaire took approximately 10 min to complete. Table 8 shows the fit indices for the overall sample and for the two subsamples. The indices show a satisfactory fit in all three cases. This result supports the validity of the model among respondents at both ends of the political spectrum.

5. Discussion

In this study, we developed a measure for political and community participation (PBS) and tested its validity. The measure was based on the conceptualization of Ekman and Amnå (2012) and was composed of four factors: disengagement, civil participation, participation in formal politics and activism. Our results suggested that the PBS was best characterized by the second-order factor model, in which participation was saturated by four first-order latent variables (disengagement, civil participation, formal political participation and activism). The second-order factor model obtained more satisfactory fit indices than did the one-factor and four-factor models, and it also showed satisfactory reliability and validity. Evidence of the construct validity of PBS was provided by correlational analyses. All forms of participation were correlated with political efficacy and with the influence component of sense of community. As for the connection with values, activism was the participatory form that was most linked to personal and political values.

Our findings indicate that different types of participation are not necessarily mutually exclusive and can be undertaken together. For instance, political militancy can be accompanied by social forms of engagement. This result suggests that there is not a simple trade-off between politics and civil society and that anti-political feelings can push people towards “privatism” and apathy, but such feelings can also lead people to undertake a vicar and counterbalancing commitment to social or community activities. The reality of engagement in contemporary societies is nuanced, and it would be reductive to describe citizens either as completely apathetic and alienated or as “global activists” (Nie and Verba 1975). The scale we developed aimed to capture a motley picture in which engagement does not automatically signify the opposite of disengagement. Indeed, one of the major strengths of the typology of Ekman and Amnå (2012) is its consideration of disengagement as an active form of participation. In this perspective, disengagement, abstention and self-distancing are choices that reflect the “repertoire of political action” available to the citizen (Kaase and Marsh 1979). Using Hirschman’s (1982) vocabulary, disengaged citizens could therefore be described either as exit-oriented citizens who quit the political arena because they lack interest in it or as voice-oriented citizens who express their disappointment by distancing themselves from active engagement. In line with Ekman and Amnå’s theoretical considerations, we affirm that the disengagement—as operationalized in the scale—is a form of “active” participation that aims to achieve a result just like other forms of participation. This form of participation is typical of those who intend to send a message to the policy. Something like “The policy has disappointed me and so I do not want to occupy more of the affairs of the community”. It is therefore necessary to distinguish the “active” and “passive” forms of disengagement. While passive forms of disengagement—“I have no interest in my community”—can not be considered a form of participation, the active forms are a desperate and final attempt to change the political choices. If this is true, it is not surprising that this form of disengagement is negatively associated with other determinants of political participation.

To conclude, our study proposed a theory-driven validated measure for capturing different and not mutually exclusive forms of participation. This is a novel approach, as the measures that have hitherto been used do not clearly distinguish between a variety of participatory behaviors and lack a theoretical model, and very few measures have undergone regular procedures for validation. On the other hand, there are some limitations of our method that need to be addressed. The major limitation of this study is that it is based on data related to a specific local context and to a short historical and political period. Participation is a highly dynamic phenomenon that is constantly changing depending on social, economic and cultural circumstances and even on the technological tools available, so it is unrealistic to create a taxonomy that can resist time and social changes. In addition, there are considerable cultural differences in the way citizens participate in the public life of their community across the world; our scale did not take such differences into consideration. For all these reasons, the generalizability of our results is currently unknown. Further research is needed to test the external validity of the PBS scale.

References

- Adler, R., & Goggin, J. (2005). What do we mean by “civic engagement”? *Journal of Transformative Education*, 3(3), 236–253.
- Amnå, E. (2010). Scandinavian Democracy Learning Diversity: From Socialisation between Lutherans to Training of Imams. In K. Sporre (Ed.), *Values, religions and education in changing societies*. Berlin: Springer.
- Anderson, M. (2009). Beyond membership: A sense of community and political behavior. *Political Behavior*, 31(4), 603–627.
- Barnes, S., & Kaase, M. (Eds.). (1979). *Political action: Mass participation in five western societies*. California: Sage.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246.
- Berger, B. (2009). Political theory, political science, and the end of civic engagement. *Perspectives on Politics*, 7(2), 335–350.
- Bowen, G. L., Martin, J. A., Mancini, J. A., & Nelson, J. P. (2000). Community capacity: Antecedents and consequences. *Journal of Community Practice*, 8(2), 1–21.
- Brady, H. (1999). Political Participation. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of political attitudes* (pp. 737–801). San Diego: Academic Press.
- Brady, H. E., Verba, S., & Schlozman, K. L. (1995). Beyond SES: A resource model of political participation. *American Political Science Review*, 89(2), 271–294.
- Cicognani, E., Zani, B., Fournier, B., Gavray, C., & Born, M. (2012). Gender differences in youths’ political engagement and participation. The role of parents and of adolescents’ social and civic participation. *Journal of Adolescence*, 35(3), 561–576.

- Conway, J. M., & Huffcutt, A. I. (2003). A review and evaluation of exploratory factor analysis practices in organizational research. *Organizational Research Methods*, 6(2), 147–168.
- Dahl, R. A. (1963). *Modern political analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Davidson, W. B., & Cotter, P. R. (1986). Sense of community and political participation. *Journal of Community Psychology*, 17, 119–125.
- Diller, E. C. (2001). *Citizens in service: The challenge of delivering civic engagement training to national service programs*. Washington, DC: Corporation for National and Community Service.
- Ekman, J., & Amnå, E. (2009). *Political participation and civic engagement: Towards a new typology*. Youth, & Society (YeS) Working Paper 2009.
- Ekman, J., & Amnå, E. (2012). *Political participation and civic engagement: Towards a new typology*. *Human Affairs*, 22(3), 283–300.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4, 272–299.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Guest, D., Conway, N., & Davey, L. (2002). A longitudinal study of the relationship between career management and organizational commitment among graduates in the first ten years at work. *Journal of Organizational Behavior*, 23, 731–748.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Englewood Cliffs: Prentice-Hall.
- Held, D. (1996). *Models of democracy*. Cambridge: Polity Press.
- Heller, K., Price, R. H., Reinhartz, S., Riger, S., Wandersman, A., & D'Aunno, T. A. (1984). *Psychology and community change: Challenges of the future*. Monterey: Brooks/Cole.
- Hirschman, A. O. (1982). *Shifting involvements: Private interest and public action*. Princeton, NJ: Princeton University Press.
- Hollister, R. (2002). *Lives of active citizenship*. Inaugural talk: John DiBiaggio Chair in Citizenship and Public Service, Tufts University.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.

- Jöreskog, K. G., & Sörbom, D. (1988). PRELIS a program for multivariate data screening and data summarization. A preprocessor for LISREL. Mooresville: Scientific Software Inc.
 - Kaase, M., & Marsh, A. (1979). Political action A theoretical perspective. In S. Barnes & M. Kaase (Eds.), *Political action: Mass participation in five western democracies* (pp. 27–56). London & Beverly Hills: Sage.
 - Keeter, S., Zukin, C., Andolina, M., & Jenkins, M. (2002). *The civic and political health of the nation: A generational portrait*. College Park, MD: Center for Information and Research on Civic Learning and Engagement (CIRCLE) School of Public Policy University of Maryland.
 - Lee, H. B., & Comrey, A. L. (1979). Distortions in a commonly used factor analytic procedure. *Multivariate Behavioral Research*, 14, 301–321.
 - Liu, A. Q., & Besser, T. (2003). Social capital and participation in community improvement activities by elderly residents in small towns and rural communities. *Rural Sociology*, 68(3), 343–365.
 - MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1, 130–149.
 - Mannarini, T., Talò, C., Gelli, B.R. (2014) Sense of community, empowerment and social action. An analysis across political orientations. *Psicologia Politica*, 48, 7–24.
 - Marsh, H. W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis testing approaches to setting cutoff values for fit indexes and dangers in overgeneralising Hu & Bentler's (1999) findings. *Structural Equation Modelling*, 11, 320–341.
 - Martín, I., & van Deth, J. W. (2007). Political Involvement. In J. W. van Deth, J. R. Montero, & A. Westholm (Eds.), *Citizenship and involvement in European democracies: A comparative analysis* (pp. 303–333). London & New York: Routledge.
 - McMillan, D., & Chavis, D. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6–23.
 - Muthén, L., & Muthén, B. (1998). *Mplus user's guide*. Los Angeles, CA: Muthén & Muthén.
 - Nie, N. H., & Verba, S. (1975). Political Participation. In F. Greenstein & N. W. Polsby (Eds.), *Handbook of political science* (Vol. IV). Reading: Addison-Wesley.
 - Parry, G., Moyser, G., & Day, N. (1992). *Political participation and democracy in Britain*. Cambridge: Cambridge University Press.
 - Pateman, C. (1970). *Participation and democratic theory*. Cambridge: Cambridge University Press.
-

- Pedhazur, E. J. (1997). *Multiple regression in behavioral research* (3rd ed.). Orlando: Harcourt Brace.
 - Peterson, N. A., Speer, P. W., & Hughey, J. (2006). Measuring sense of community: A methodological interpretation of the factor structure debate. *Journal of Community Psychology*, 34(4), 453–469.
 - Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). Validation of a brief sense of community scale: Confirmation of the principal theory of sense of community. *Journal of Community Psychology*, 36(1), 61–73.
 - Prezza, M., Pacilli, M. G., Barbaranelli, C., & Zampatti, E. (2009). The MTSOCS: A multidimensional sense of community scale for local communities. *Journal of Community Psychology*, 37(3), 305–326.
 - Rapley, M., & Beyer, S. (1996). Daily life, community participation and quality of life in an ordinary housing network. *Journal of Applied Research in Intellectual Disabilities*, 9, 31–39.
 - Rollero, C., Tartaglia, S., De Piccoli, N., & Ceccarini, L. (2009). Sociopolitical control and sense of community. A study on political participation. *Psicologia Politica*, 39, 7–18.
 - Ronan B. (2004). Testimony at the white house conference on aging public forum on civic engagement in an older America, Phoenix, Arizona, 25 February 2004.
 - Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). New York: Academic Press.
 - Schwartz, S. H., Caprara, G. V., & Vecchione, M. (2010). Basic personal values, core political values, and voting: A longitudinal study. *Political Psychology*, 31, 421–452.
 - Stern, P. C., Dietz, T., & Guagnano, G. A. (1998). A brief inventory of values. *Educational and Psychological Measurement*, 58, 984–1001.
 - Talò, C., Mannarini, T., Rochira, A. (2014). Sense of community and community participation: A meta-analytic review. *Social Indicator Research*, 117, 1, 1–28.
 - Teorell, J., Torcal, M., & Montero, J. R. (2007). Political Participation: Mapping the Terrain. In J. W. van Deth, J. R. Montero, & A. Westholm (Eds.), *Citizenship and involvement in European democracies: A comparative analysis* (pp. 334–357). London & New York: Routledge.
 - Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74(1), 118–128.
 - van Deth, J. W. (2001). Studying political participation: Towards a theory of everything? Paper presented at the joint sessions of workshops of the European consortium for political research, Grenoble, 6–11 April 2001.
-

- Verba, S., & Nie, N. H. (1972). *Participation in America: Political democracy and social equality*. New York: Harper & Row.
 - Verba, S., Schlozman, K. L., & Brady, H. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.
 - Weber, E. U., Shafir, S., & Blais, A. R. (2004). Predicting risk sensitivity in humans and lower animals: Risk as variance or coefficient of variation. *Psychological Review*, 111, 430–445.
 - Yeich, S., & Levine, R. (1994). Political efficacy: Enhancing the construct and its relationship to mobilization of people. *Journal of Community Psychology*, 22, 259–271.
-